



Preface

This volume contains the proceedings of the Second Workshop on Reachability Problems in Computational Models (RP'08). The workshop was held in Liverpool, UK on September 15–17, 2008. The aim of the Reachability Problems workshop series is to bring together researchers with a common interest in reachability problems that appear in

- Algebraic structures
- Computational models
- Hybrid systems
- Verification

The previous workshop has been successfully organized in Turku University, Finland as a satellite event to the Developments in Language Theory Conference in 2007.

The workshop is mainly focused on reachability problems in different computational models and systems. Topics of interest include (but are not limited to): Reachability problems in infinite state systems, rewriting systems, dynamical and hybrid systems; reachability problems in logic and verification; reachability analysis in different computational models, counter/ timed/ cellular/ communicating automata; Petri-Nets; computational aspects of algebraic structures (semi-groups, groups and rings); predictability in iterative maps and new computational paradigms.

The workshop was supported by London Mathematical Society and it was organized by University of Liverpool. The high quality of the volume was achieved through the hard work of the Program Committee, consisting of Parosh Aziz Abdulla (Uppsala), Eugene Asarin (Paris), Vincent Blondel (Louvain), Ahmed Bouajjani (Paris), Olivier Bournez (Nancy), Cristian S. Calude (Auckland), Javier Esparza (Munich), Vesa Halava (Turku), Oscar Ibarra (Santa Barbara), Juhani Karhumäki (Turku), Igor Potapov (Liverpool), Colin Stirling (Edinburgh), Wolfgang Thomas (Aachen) and Hsu-Chun Yen (Taipei) with the help of external referees, among them Emmanuel Hainry, Raphael Jungers, Astrid Rakow, Kai Salomaa and Fang Yu.

The Programme Committee, selected 14 papers to be presented as regular con-

tributions. In addition the program of the workshop included four invited talks:

- “Monotonic Abstraction in Parameterized Verification”, Parosh Aziz Abdulla
- “Reachability via Cooperating Morphisms”, Juhani Karhumäki
- “Dependency Tree Automata”, Colin Stirling
- “Reachability in the Infinite: Decidability and Limitations”, Wolfgang Thomas.

and two informal presentations:

- “Tutorial on the Petri net reachability problem”, Kamal Lodaya
- “Solving coverability problems by supercompilation” Alexei Lisitsa and Andrei Nemytykh.

These proceedings will be published as a volume in the series Electronic Notes in Theoretical Computer Science (ENTCS). We are grateful to ENTCS for their support and in particular to Mike Mislove, Managing Editor of the ENTCS series.

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